



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

June 2, 1982

Mr. Harold Kobayashi
3301 Lone Mountain Drive, Apt. 64
Carson City, Nevada 89701

RE: Permitting
Westwater Humus Mines
ACT/019/012
Grand County, Utah

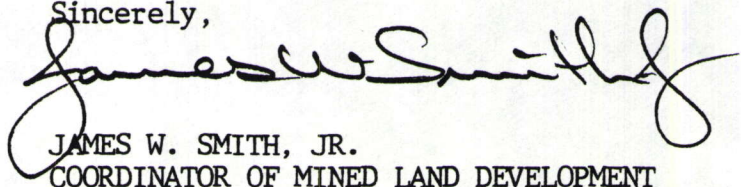
Dear Mr. Kobayashi:

The Division of Oil, Gas, and Mining has made a preliminary review of the Westwater Humus Mine Plan to determine compliance with Rule M-3 of the Utah Mined Land Reclamation Act of 1975, Title 40-8, Utah Code Annotated 1953. This review was based on information submitted in MR Forms 1, 2, and 8, and in the Final Environmental Analysis approved by the Bureau of Land Management.

In this review, certain necessary information was found to be lacking. The additional information that is needed to complete our review is detailed on the following pages. This information should be submitted as part of, or in conjunction with, the revised MR-1 Form that was forwarded to you by Mr. Baker. When the additional information and forms have been received, the total plan can be assessed for compliance with the regulations.

If you have any questions, or would like to set up a meeting with members of the review team, please contact me or Susan Linner of my staff.

Sincerely,



JAMES W. SMITH, JR.
COORDINATOR OF MINED LAND DEVELOPMENT

Encl: a/s

cc: Baker Associates, Inc.

SCL/cp

Rule M-3(1)(a)-(d)

The applicant should submit a topographic map of the permit area showing the property boundary, the area that will ultimately be disturbed by mining, the location of proposed or existing facilities, and the location of any streams, drainages, springs, roads, or transmission lines within 500 feet of the property boundary. This map should be of a 1"=200' or 1"=400' scale.

The total number of surface acres to be disturbed, including roads, should be submitted. This should be broken down into disturbance acreage by year, and a map should be submitted showing the mining sequence and the area to be disturbed each year of mine life.

Rule M-3(1)(e)

A topographic map of the same scale as described above should be submitted showing how drainage will be kept away from areas where overburden or topsoil will be removed. The map should indicate the directional flow of water and provide a drainage plan showing any proposed ponds, berms, or water diversions. It should also show the location(s) of stored topsoil and measures to protect topsoil from water erosion.

Rule M-3(1)(f)

Have any cores been taken that could be used to assess the ground water regime in the permit area? If so, please supply the Division with that information.

Rule M-3(2)(c)

Applicant should describe the removal and stockpiling of topsoil and overburden materials. Depth of available topsoil should be indicated, as well as depth which will be reapplied to the area after mining. The volume of topsoil stored at any one time, as well as the length that topsoil will be stockpiled should be indicated. Measures to stabilize stored topsoil from wind and water erosion (i.e., with berms, vegetative cover, or mulch) should be proposed.

Rule M-3(2)(d)

Applicant should discuss how backfilling and regrading of mined areas will be accomplished. Equipment to be used and compaction factors should be outlined. If terracing will be done, lift heights should be discussed.

Rule M-3(2)(e)

A baseline study to determine the percent cover of native vegetation on the permit area needs to be undertaken in order to determine a standard for successful revegetation. Existing BLM surveys on the area or similar surrounding areas may be accepted.

Rule M-3(2)(f)

A detailed timetable for reclamation of the disturbed area should be submitted. If reclamation activities will be conducted on a yearly basis, a timetable considering the disturbance and reclamation for each year should be devised.

Rule M-3(3)

Pre- and post-mining profile cross-sections through the mined area should be provided. The location of the cross-sections should be shown on the topographic mine map.

Information on the humate seam, such as thickness over the permit area, dip, and areas of outcrop should be submitted.

Cross-sectional profiles of the access road, general road grade, and sizing calculations for any culverts or diversions should be submitted.

Rule M-5

Applicant should submit an estimate of a reclamation surety bond on the basis of the total amount of disturbance that will need to be finally reclaimed. Enclosed is a copy of the standard bonding form the Division uses. Bond estimate should take into account all items on the form, as well as any other reclamation measures necessary.

Rule M-10(2)

Applicant should post a heavy equipment operation warning sign on the access road.

Rule M-10(7)

Applicant should discuss reclamation of the access road and any pad areas used for stockpiles, as far as ripping, regrading, and preparation for final revegetation.

Rule M-10(12)

A complete revegetation plan, including seedbed preparation methods, time of year of seeding, seeding methods, an appropriate revegetation species list (given in pounds of pure live seed per acre), and use of mulching (kind and amount per acre), fertilization, and irrigation should be submitted. Methods and a timetable for monitoring revegetated areas should be discussed, along with procedures to determine success of revegetation (i.e., statistical tests to compare revegetated areas with the established success standard). If test plots will be used a discussion of how they will be set up, what methods will be tested, and monitoring methods should be included. Applicant should discuss any measures that will be necessary to keep domestic and wild animals from revegetated areas and test plots (i.e., fencing or other means of control).

Rule M-10(14)

A complete series of soils tests should be undertaken in order to determine soil potential to support revegetation efforts. Tests should include pH, electrical conductivity (in mmhos/cm), sodium absorption ratio (SAR), and concentrations (in ppm) of sodium, magnesium, calcium, phosphorus, and available nitrogen. If there is more than one soil type on the area that will be mined, samples should be taken from each type and a map submitted delineating the areas covered by each type and showing where the samples were taken.

In addition to addressing the above points, the Applicant should submit a copy of the BLM approval (including stipulations), and any other approvals from State or Federal agencies.